ABSTRACT

Keywords: Choledochal cyst, hepatico-duodenostomy, hepatico-jejunostomy, Stricture, Cholangitis after biliary stricture, Biliary enteric bypass.

Title: Surgery of choledochal cyst. A study of the clinical profile and clinical outcomes when the two commonly used hepatico-enteric anastomosis are compared.

Billiary **E**nteric **A**nastomosis in **Ch**oledochal cyst **(BEACH TRIAL)**

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Aims/Objectives: To study the demography, presentations and outcomes in children who present for surgery of choledochal cyst. Statistical comparison of the two types of biliary enteric anastomosis – hepatico-duodenostomy (HD) and hepatico-jejunostomy (HJ) and discuss the early to medium term complications and outcomes. The trial aims to determine if there is a difference in outcomes between these two.

Materials and methods: 70 patients were studied – 35 in each arm. Their baseline characteristics were compared and their outcomes and complications noted. Demographic data and data from investigations ordered were also analysed. Data was obtained from a patient's history and clinical examination. Imaging, blood analysis and nuclear imaging data was also collected.

Results and conclusions: Both groups HD and HJ had similar baseline characteristics. A mean follow up of 22 months in the HD and 25 months in the HJ group was obtained. Loss to follow up was less than 20%. It was interesting to note that the average bilirubin at presentation in both groups was over 2.1 mg%. The HJ group had more unusual presentations that required surgery. Both groups had similar rates of individual complications– such as intestinal obstruction, pancreatitis, cholangitis, pancreatic leak, jaundice, pelvic abscess and wound infections. There is no statistical difference between the two groups. If all complications were combined, there is a 3.6 times greater chance to develop any complication in a HJ when compared to a HD.

Conclusions: It can be concluded that there is a role for both the anastomosis – early to intermediate follow up shows no significant difference between the two anastomosis. A randomized controlled trial that has at least a 10 year follow up can be justified on the basis of this trial.